International application No. PCT/KR2005/000234

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C12N 9/24, C12N 9/30, C12N 15/56, C12N 15/63, C12N 9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C12N 9/24, C12N 9/30, C12N 15/56, C12N 15/63, C12N 9/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

NCBI PubMed, Esp@cenet, CA "dextranase, Lipomyces starkeyi, plaque, mouthwash"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Ä	WO 2003/018790 A1 (LIFENZA CO., LTD.) 6 MARCH 2003 (06.03.2003) See the whole document	1-10
. A	WO 2001/066570 A1 (KIM et al.) 13 SEPTEMBER 2001 (13.09.2001) See the whole document	1-10
A .	KIM D.M. et al., 'Characterization of a novel carbohydrase from Lipomyces starkeyi KSM22 for dental application', In: J. Microbiol. Biotechnol., 1999, Vol. 9(3), pp. 260-264 See the whole document	1-10
. A	RYU S.J. et al., 'Purification and partial characterization of a novel glucanhydrolase from Lipomyces starkeyi KSM22 and its use for inhibition of insoluble glucan formation', In: Biosci. Biotechnol. Biochem., 2000, Vol. 64(2), pp. 223-228 See the whole document	1-10
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-1 -	Further	documents as	e listed in	the	continuation	of Box	C.
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See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filling date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

27 APRIL 2005 (27.04.2005)

Date of mailing of the international search report

27 APRIL 2005 (27.04.2005)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

CHO, YOUNG GYUN

Authorized officer

Telephone No. 82-42-481-8132



International application No.

PCT/KR2005/000234

BO	Box No. 1 Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)									
1.	Wi inv	th reg	ard to any	nucleotide and	d/or amino acid s h was carried out	equence disclos on the basis of :	ed in the internat	ional application an	d necessary to	the claimed
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			-	-	equence listing					
			table(s) i	ciated to the se	equence usung					
	b	form	at of mater	rial						
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	c.	time	of filing/fu	ırnishing		·				
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		\boxtimes	filed toge	ether with the i	international appl	ication in comp	iter readable for	m		
		\sqcap	furnished	subsequently	to this Authority	for the purpose	of search	•		
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2.		or	furnished,	the required s	statements that the	information in	the subsequent o	ing and/or table rel or additional copies riate, were furnished	is identical to the	is been filed nat in the
		αp	prication a	z inca or accs	not go beyond a	e application as	uied, aż abbiobi	tare, were furnished	· : .	• • • • • •
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Information on patent family members

International application No. PCT/KR2005/000234

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2003/018790 A1	06.03.2003	None	
WO 2001/066570 A1	13.09.2001	US 6485953 B1 AU 3331300 A1 KR 2001/006792 A	26.11.2002 17.09.2001 26.01.2001

International application No. PCT/KR2005/000234

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A	RYU S.J. et al., 'Purification and partial characterization of a novel glucanhydrolase from Lipomyces starkeyi KSM22 and its use for inhibition of insoluble glucan formation', In: Biosci. Biotechnol. Biochem., 2000, Vol. 64(2), pp. 223-228 See the whole document	1-10

See patent family annex.

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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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Authorized officer

Telephone No. 82-42-481-8132



International application No.

PCT/KR2005/000234

Sox No. I Nucleotide and/or amino acid sequence(s) (Continuation of item1.b of the first sheet)				
With regard to any nucleotide and/or amino acid sequence invention, the international search was carried out on the bases.	the disclosed in the international application and necessary to the claimed basis of:			
a. type of material				
a sequence listing				
table(s) related to the sequence listing				
b. format of material				
in written format				
in computer readable form				
c. time of filing/furnishing				
contained in the international application as file	ed			
filed together with the international application	in computer readable form			
furnished subsequently to this Authority for the	e purposes of search			
 In addition, in the case that more than one version or furnished, the required statements that the inform 	or copy of a sequence listing and/or table relating thereto has been filed mation in the subsequent or additional copies is identical to that in the			
application as filed or does not go beyond the application	ication as filed, as appropriate, were furnished.			
3. Additional comments:				
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Information on patent family members

International application No.
PCT/KR2005/000234

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2003/018790 A1	06.03.2003	None	
WO 2001/066570 A1	13.09.2001	US 6485953 B1 AU 3331300 A1 KR 2001/006792 A	26.11.2002 17.09.2001 26.01.2001